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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,142	09/24/2003	George R. Greene JR.	612-04-CIP3-CON	7335
22145 7590 12/26/2007 KLEIN, O'NEILL & SINGH, LLP 43 CORPORATE PARK SUITE 204 IRVINE, CA 92606			EXAMINER SWIGER III, JAMES L	
			ART UNIT 3733	PAPER NUMBER
			MAIL DATE 12/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/670,142

Applicant(s)

GREENE ET AL.

Examiner

James L. Swiger

Art Unit

3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-35, 56-59, 61, 62 and 64-77 is/are pending in the application.
- 4a) Of the above claim(s) 29, 30 and 64-67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27, 28, 31-35, 56-59, 61, 62 and 68-77 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/24/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/18/2007 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-28, 57-58, 62, 68-72, and 75-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zollikofer et al. ("A Combination of Stainless Steel Coil...") in view of Mehta (US Patent 5,258,042).

Zollikofer et al. disclose an embolic device comprising a flexible filamentous carrier along a length of wire (see Fig. 4a). Because of its coiled shape, the wire is capable of elastic memory, being initially configured in a formed loop structure and is expandible as a continuous length of microcoil that would form a 3-D shape. Zollikofer et al. also disclose embolizing elements that are formed of an expansible hydrophilic

polymer.

Zollikofer et al. disclose the claimed invention including a hydrophilic polymer. In the spirit of the invention the polymer is designed to enter the affected area guided by the embolic device. In further specificity, Zollikofer does not disclose a polymeric structure, specifically. Though it may be considered inherent that polymer would already have a polymeric structure, and also that "control" may depend on the ability of the polymer to accept water or an aqueous substance, Mehta teaches the use of a polymer that expands and fills the intended area of the vascular structure. Additionally, Mehta teaches that their hydrogel used is of a polymer network which is capable of absorbing and retaining a significant quantity of water within its network. (See Col. 3, lines 5-15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Zollikofer et al. having at least a hydrophilic polymer with a polymeric structure in view of Mehta to better occlude the affected area.

It is further noted that with regards to the material choice of the hydrophilic/polymeric material it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the embolizing element out of this material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claim 56 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zollikofer et al. and Mehta '042 and further in view of Phelps et al. (US Patent

5,382,259). Zollikofer et al. and Mehta '042 disclose the claimed invention *supra* except for the embolizing element to be partially made of stretch-resistant material. Phelps et al. disclose an embolization device comprising a flexible filamentous carrier having a continuous coaxial embolizing element non-releasibly fixed to the exterior surface along a substantial portion of the carrier. The embolizing elements are formed of a stretch-resistant biocompatible polymer (e.g. a polyester or nylon). See Col. 2, lines 50-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Zollikofer et al. and Mehta '042 having at least a material that is stretch-resistant in view of Phelps et al. to better use the device.

Claims 31-32, and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zollikofer et al. and Mehta '042 in further view of Palermo et al. (US Patent 5,350,397). Zollikofer et al. and Mehta '042 disclose the claimed invention except for a linkage element. Palermo et al. teaches to provide a proximal end of a carrier with a linkage element that releasably attaches to the carrier, such as to a distal end of a deployment instrument (see Col. 1, lines 6-14). This is done so that the positioning of the coil at the site may be controlled to a fine degree of accuracy (see Col. 2, lines 1-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Zollikofer et al. and Mehta '042 with a linkage element in view of Palermo et al. to better control to a fine degree of accuracy the position of the device in use.

Claims 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Zollikofer et al. and Mehta '042 and Palermo et al. '397 as applied to

claim 31 above, and further in view of Rosenbluth et al. (US Patent 6,015,424).

The combination of Zollikofer et al. and Mehta '042 and Palermo et al. '397 disclose the claimed invention except for deployment of the linkage element by electric, heat or fluid pressure. Rosenbluth et al. teaches the use of electric current (see Col. 8, lines 10-20), heat (see Col. 2, lines 35-47), and pressure (Col 4, lines 30-37). These variations allow for an improved deployment of the linkage element and embolic device. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of the combination of Zollikofer et al. and Mehta '042 and Palermo et al. '397 having at least the use of electricity, heat, and or fluid pressure to better deploy the instrument in use.

Claims 59 and 61 rejected under 35 U.S.C. 103(a) as being unpatentable over Zollikofer et al. and Mehta '042 in view of Evans et al. (US patent 5,695,480). Zollikofer et al. disclose the claimed invention except for the embolizing element being radiopaque. Evans et al. disclose that the embolizing elements can have radiopaque agents in order that the physician can visualize the delivery of the embolizing elements to the vascular site via convention techniques, such as fluoroscopy (see Col2, lines 15-19). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Zollikofer et al. and Mehta '042 with the embolizing elements having radiopaque agents in view of Evans et al. in order to allow the physician to visualize the delivery of the embolizing elements.

Response to Arguments

Applicant's arguments with respect to claims 27-28, 31-35, 56-59, 61-62, and 68-77 have been considered but are moot in view of the new ground(s) of rejection.

In summary above, the Action has been amended to address the more specific coating structure over Zollikofer et al.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James L. Swiger whose telephone number is 571-272-5557. The examiner can normally be reached on Monday through Friday, 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on 571-272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

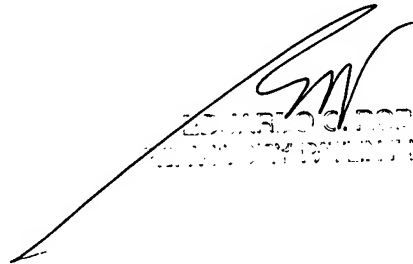
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

 12/17/07

JLS


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AND
APPROVED FOR
SIGNATURE